

## DEPARTMENT OF THE INTERIOR

## Fish and Wildlife Service

## 50 CFR Part 17

**Endangered and Threatened Wildlife and Plants; Proposed Endangered Status and Critical Habitat for the Alabama Beach Mouse, Perdido Key Beach Mouse, and Choctawhatchee Beach Mouse**

**AGENCY:** Fish and Wildlife Service, Interior.

**ACTION:** Proposed rule.

**SUMMARY:** The Service proposes to determine endangered status and critical habitat for the Alabama beach mouse, Perdido Key beach mouse, and Choctawhatchee beach mouse. The three beach mice are endemic to the Gulf Coast of southern Alabama and northwestern Florida. They are restricted to sand dune habitat, which is being destroyed by residential and commercial development, recreational activity, and tropical storms. This proposal, if made final, would implement the protection of the Endangered Species Act of 1973, as amended, for the three beach mice. The Service seeks relevant data and comments from the public.

**DATES:** Comments from the public and the States of Alabama and Florida must be received by August 6, 1984. Public hearing requests must be received by July 23, 1984.

**ADDRESSES:** Comments and materials concerning this proposal should be sent to the Endangered Species Field Supervisor, U.S. Fish and Wildlife Service, 2747 Art Museum Drive, Jacksonville, Florida 32207. Comments and materials received will be available for public inspection, by appointment, during normal business hours at the above address.

**FOR FURTHER INFORMATION CONTACT:** Mr. David J. Wesley, Endangered Species Field Supervisor, at the above address (904/791-2580 or FTS 946-2580).

**SUPPLEMENTARY INFORMATION:**

**Background**

The species *Peromyscus polionotus*, often known as the oldfield mouse, occurs in northeastern Mississippi, Alabama, Georgia, South Carolina, and Florida; 16 subspecies are currently recognized (Hall, 1981). Certain of the subspecies are endemic to the beaches and sandy fields of southern Alabama and northwestern Florida. Prior to a detailed study by Bowen (1968), involving the interrelationships of genetics, morphology, historical geology,

and habitat, only 3 subspecies were recognized in the latter region. Bowen determined that variation was much more extensive than previously thought, and he described 5 new subspecies, including the 3 that are the subjects of this proposal: the Alabama beach mouse (*P. p. ammobates*), originally found on coastal dunes from Fort Morgan to Alabama Point, and on Ono Island, Baldwin County, Alabama; the Perdido Key beach mouse (*P. p. trissyllepsis*), originally found on much of Perdido Key, which extends along the Gulf Coast of Baldwin County, Alabama, and Escambia County, Florida; and the Choctawhatchee beach mouse (*P. p. allophrys*), originally found on the Gulf Coast of Florida from the East Pass of Choctawhatchee Bay, Okaloosa County, eastward to Shell Island, Bay County.

Beach mice have small bodies, haired tails, relatively large ears, protuberant eyes, and coloration that blends well with the sandy soils and dune vegetation of their habitat. In the Alabama beach mouse, also called the Alabama Gulf Coast beach mouse or white-fronted mouse, head and body length is 68 to 88 millimeters (mm) (2.7 to 3.4 inches (in.)), tail length is 42 to 60 mm (1.6 to 2.3 in.), the upper parts are pale gray with an indistinct middorsal stripe, the sides and underparts are white, and the tail is white with an incomplete dorsal stripe. In the Perdido Key beach mouse, also called the Perdido Bay beach mouse or Florida beach mouse, head and body length is 70 to 85 mm (2.7 to 3.3 in.), tail length is 45 to 54 mm (1.8 to 2.1 in.), the upper parts are grayish fawn to wood brown with a very pale yellow hue and an indistinct middorsal stripe, the white of the underparts reaches to the lower border of the eyes and ears, and the tail is white to pale grayish brown with no dorsal stripe. In the Choctawhatchee beach mouse, head and body length is 70 to 89 mm (2.7 to 3.5 in.), tail length is 43 to 64 mm (1.7 to 2.5 in.), the upper parts are orange-brown to yellow-brown, the underparts are white, and the tail has a variable dorsal stripe (Bowen, 1968; Ehrhart, 1978; Howell, 1920; Linzey, 1978).

The sand dune areas which the three subspecies of beach mice inhabit are not uniform. Several microhabitat differences occur. The depth of the habitat, from the beach inland, may vary depending on the configuration of the sand dune system and the vegetation. There are commonly several rows of dunes, paralleling the shoreline and occasionally ranging up to 14 meters (46 feet) in height. The frontal dunes are sparsely vegetated with widely scattered grasses including sea oats

(*Uniola paniculata*), bunch-grass (*Andropogon maritimus*), and beach grass (*Panicum amarum* and *P. repens*), and with seaside rosemary (*Ceratiola ericoides*), beach morning glory (*Ipomoea stolonifera*), and railroad vine (*I. pes-caprae*). The interdunal areas contain cordgrass (*Spartina patens*), sedges (*Cyperus* sp.), rushes (*Juncus scirpoides*), pennywort (*Hydrocotyle bonariensis*), and salt-grass (*Distichlis spicata*). The dunes farther inland from the Gulf support growths of saw palmetto (*Serenoa repens*), slash pine (*Pinus elliotii*), sand pine (*P. clausa*), and scrubby shrubs and oaks including yaupon (*Ilex vomitoria*), marsh-elder (*Iva* sp.), scrub oak (*Quercus myrtifolia*), and sand-live oak (*Q. virginiana* var. *maritima*). Seaside goldenrod (*Solidago paucifloruscula*), aster (*Heterotheca subaxillaris*), and *Paronychia* sp. may also be present.

Human and natural alteration of coastal ecosystems has resulted in severe declines of beach mice. Most suitable habitat has been lost because of residential and commercial development, recreational activity, beach erosion, an vegetational succession. Competition from introduced house mice (*Mus musculus*) and predation by domestic cats (*Felis catus*) also seem to be problems. Tropical storms are a constant threat to the remnant, fragmented populations of beach mice. Hurricane Frederick, in September 1979, was especially bad, destroying large areas of habitat for all three subspecies. Bowen (1968) observed that more than two-thirds of the habitat of *P. p. allophrys* had been lost since 1950, as a result of the coastal real estate boom.

Several recent status surveys and habitat analyses have indicated that the situation continues to worsen. Holliman (1982) found *P. p. ammobates* to still survive on disjunct tracts of the sand dune system from Fort Morgan State Park to the Romar Beach area, but to have apparently disappeared from most of its original range, including all of Ono Island. Working in various parts of the habitat of the subspecies, with a total length of 20.6 kilometers (km) (12.8 miles (mi.)), he live-trapped (and released after marking) an average of 13.4 beach mice per 100 trap-nights of effort. He estimated *P. p. ammobates* to contain a total of 875 individuals on 134.6 hectares (332.6 acres), a relatively low population size for a small mammal. A few months later, Meyers (1983), working in the same areas, live-trapped an average of only 3.6 *P. p. ammobates* per 100 trap-nights.

Humphrey and Barbour (1981) made a study of *P. p. trissyllepsis* in 1979, prior to Hurricane Frederick. They estimated that only 78 individuals of the subspecies survived, there being 52 at the Gulf Islands National Seashore on the eastern part of Perdido Key and 26 at the Gulf State Park on the western part of the Key. Holliman (1982), working at Gulf State Park after Hurricane Frederick, caught only a single specimen of *P. p. trissyllepsis*. Subsequently, Meyers (1983) captured 13 individual *P. p. trissyllepsis* at Gulf State Park, but none at Gulf Islands National Seashore. He considered the subspecies to have been exterminated in the latter area by Hurricane Frederick. This drastic reduction to one population with barely two dozen individuals, occupying a restricted habitat that is highly vulnerable to destruction, probably makes the Perdido Key beach mouse the most critically endangered mammal in the United States.

As late as 1950, *P. p. allopshys* was widespread and abundant along the barrier beach between Choctawhatchee and St. Andrew Bays. In 1979, however, Humphrey and Barbour (1981) found that the subspecies had been extirpated at 7 of the 9 localities from which it had previously been known. They also discovered it on Shell Island. The subspecies was estimated to contain at least 515 individuals. Meyers (1983) confirmed the survival of *P. p. allopshys* on Shell Island.

On June 7, 1979, the Alabama Department of Conservation and Natural Resources, Game and Fish Division, responded to a Service inquiry regarding priority ratings for candidate species that might merit addition to the U.S. List of Endangered and Threatened Wildlife, pursuant to the Endangered Species Act of 1973, as amended (16 U.S.C. 1531 *et seq.*). The Department stated that the Alabama and Perdido Key beach mice should have the highest listing priority for mammals in Alabama. On October 26, 1982, Dr. Dan C. Holliman, Division of Science and Mathematics, Birmingham-Southern College, Birmingham, Alabama, petitioned the Service to add the Alabama beach mouse and Perdido Key beach mouse to the List. In the **Federal Register** of February 15, 1983 (48 FR 6752-6753), the Service published a notice of findings that accepted this petition.

On June 9, 1982, Dr. Stephen R. Humphrey, Associate Curator in Ecology, Florida State Museum, Gainesville, Florida, petitioned the U.S. Fish and Wildlife Service to add the Perdido Key and Choctawhatchee beach

mice to the List of Endangered and Threatened Wildlife. The petition included a status report prepared under contract to the Florida Game and Fresh Water Fish Commission. Portions of the report were recently published (Humphrey and Barbour, 1981). On June 21, 1982, the Florida Game and Fresh Water Fish Commission stated its full support for Dr. Humphrey's petition and requested that listing be expedited. In the **Federal Register** of October 6, 1982 (47 FR 44125), the Service published a notice of petition acceptance and status review, and announced its intention to propose listing the two subspecies with critical habitat.

In the **Federal Register** of December 30, 1982 (47 FR 58454-58460), all three beach mice were included in the Service's Review of Vertebrate Wildlife. The Perdido Key and Choctawhatchee beach mice were placed in Category 1 of the Review, meaning that there was substantial information on hand to support the biological appropriateness of a listing proposal. The Alabama beach mouse was placed in Category 2, meaning that proposing to list was possibly appropriate, but substantial supporting data were not available. Such data were subsequently received, especially the reports by Holliman (1982) and Meyers (1983).

On October 13, 1983, the petition finding was made that listing of all three beach mice was warranted but precluded by other pending listing measures, in accordance with Section 4(b)(3)(B)(iii) of the Act. Such findings require a recycling of the petitions, pursuant to Section 4(b)(3)(C)(i) of the Act. Therefore a new finding must be made, and, now that the other pending measures have been processed, the publication of this proposed rule constitutes the finding that the petitioned action is warranted, in accordance with Section 4(b)(3)(B)(ii) of the Act.

#### Summary of Factors Affecting the Species

Section 4(a)(1) of the Endangered Species Act (16 U.S.C. 1531 *et seq.*) and regulations promulgated to implement the listing provisions of the Act (codified in 50 CFR Part 424; under revision to accommodate 1982 amendments to the Act—see proposal in **Federal Register** of August 8, 1983 (48 FR 36062-36069)) set forth the procedures for adding species to the Federal lists. A species may be determined to be an endangered species or a threatened species due to one or more of the five factors described in Section 4(a)(1) of the Act. These factors and their application to the Alabama

(*Peromyscus polionotus ammobates*), Perdido Key (*P. p. trissyllepsis*) and Choctawhatchee (*P. p. allopshys*) beach mice are as follows:

A. *The present or threatened destruction, modification, or curtailment of its habitat or range.* The Alabama, Perdido Key, and Choctawhatchee beach mice historically ranged along approximately 166.0 km (103.1 mi.) of coastal sand dunes in Baldwin County, Alabama, and Escambia, Okaloosa, Walton, and Bay Counties, Florida. Based on recent status surveys (Holliman, 1982; Humphrey and Barbour, 1981; Meyers, 1983), and on observations by the primary author in July, 1983, the three beach mice are at present found on not more than 42.9 km (26.6 mi.) of Gulf Coast dunes. Thus, their range has been reduced to about a fourth of the original size.

The major threat to beach mouse habitat continues to be human destruction of the coastal sand dune ecosystem for commercial and residential development (Bowen, 1968; Ehrhart, 1978; Meyers, 1983). In addition, recreational use of the sand dunes by pedestrians and vehicles can destroy vegetation essential for dune development and maintenance. Such loss of vegetation results in extensive wind and water erosion, reducing the effectiveness of coastal dunes as a protective barrier and ultimately destroying beach mouse habitat.

Intensive commercial and residential development in Florida has restricted public use of beaches. Property owners are not required to provide access to the publicly owned wet sand beaches. This results in an increasing demand on accessible public beaches, causing increased erosion and loss of beach mouse habitat. If properly managed, however, public use of beaches is compatible with maintenance of beach mouse habitat (Meyers, 1983).

Residential and commercial development isolates small areas of beach mouse habitat, thereby fragmenting populations and upsetting gene flow. Low-density residential development does not necessarily create isolation of habitat, but high density multiple housing can act as a barrier to migration between populations. If any such population segment is extirpated, it cannot be replaced by natural immigration (Meyers, 1983).

Another problem might be the routine channel maintenance program conducted by the U.S. Army Corps of Engineers. The program involves the removal of accreted sand from channels and passes and the disposal of the sand in the vicinity of beach mouse habitat. If

measures were not taken to protect beach mouse habitat during the dredging and disposal activities, the habitat could be threatened. Based on the Corps' recent planning for a maintenance project at the Perdido Pass Channel, Alabama, however, it appears that with careful consideration of beach mouse requirements in developing and conducting the maintenance projects, habitat should not be threatened.

There is concern in Alabama that there may be pressure to locate natural gas extraction facilities on the publicly-owned Gulf Coast beaches on the Fort Morgan Peninsula. The development of such facilities could destroy beach mouse habitat.

**B. Overutilization for commercial, recreational, scientific, or educational purposes.** Not now known to be applicable.

**C. Disease or predation.** Bowen (1968) suggested that predation by feral house cats posed an imminent threat to beach mouse populations. The absence of a beach mouse population on Ono Island may be attributable to cat predation (Holliman, 1982). The presence of feral house cats and other predators in or near beach mouse habitat may be fostered by the existence of open refuse containers associated with residential and commercial development or recreational use (James N. Layne, Archbold Biological Station, Lake Placid, Florida, personal communication; Meyers, 1983).

**D. The inadequacy of existing regulatory mechanisms.** Current controls affecting development in Gulf Coast sand dunes include subdivision, building department, and coast high hazard construction regulations in Baldwin County, Alabama, and building codes, subdivision regulations, and coastal construction lines in Escambia, Walton, and Bay Counties, Florida. In addition, vehicular access to the dunes is controlled. None of these controls makes special provisions for beach mouse habitat protection. They do not prevent development in such habitat, or deal with the specific needs of the mice in relation to development, but simply establish general requirements for the siting and construction of buildings, utilities, and access corridors. These regulatory mechanisms have not prevented substantial loss of beach mouse habitat in the past, and, despite their existence and enforcement, the degradation and destruction of such habitat now continues.

In both Alabama and Florida, State laws protect sea oats from being picked. However, these laws do not prohibit the destruction of sea oats during construction activities.

The Federal Coastal Barrier Resources Act of 1982 prohibits the expenditure of most new Federal financial assistance in units of the Coastal Barrier Resources System (CBRS). The Act also amends and conforms the Federal Flood Insurance Provisions of the Omnibus Budget Reconciliation Act of 1981 pertaining to undeveloped coastal barriers. The statutory ban on Federal flood insurance went into effect on October 1, 1983. Within the range of *P. p. ammobates* is the Mobile Point Unit of the CBRS, which includes approximately 4.0 km (2.4 mi.) of beach mouse habitat. Within the historical range of *P. p. allopkyrs* are the Moreno Point, Four Mile Village, and St. Andrews Complex Units of the CBRS, which include approximately 12.3 km (7.6 mi.) of beach mouse habitat.

Despite all of these regulatory devices of the county, State, and Federal governments, beach mouse habitat continues to be rapidly destroyed by construction activities. In the Coastal Barrier Resources System Units, construction is still proceeding rapidly with non-Federal financing. While vehicular access to the dunes is prohibited in most cases, there is evidence that it still occurs intermittently.

In Alabama, *P. p. ammobates* and *P. p. trissyllepsis* have no legal status. The Alabama Department of Conservation and Natural Resources endorses the Alabama Museum of Natural History list which identifies *P. p. ammobates* as threatened and *P. p. trissyllepsis* as endangered (Dusi, 1976). However, there is no protection, except that a permit is required for scientific collecting. The Florida Endangered and Threatened Species Act of 1977 lists *P. p. trissyllepsis* and *P. p. allopkyrs* as threatened. Title 39-27.02 of the Administrative Code affords them protection from taking, possession, and sale, except by permit, but does not protect their habitat.

**E. Other natural or man-made factors affecting their continued existence.** Tropical storms periodically devastate Gulf Coast sand dune communities, dramatically altering or destroying habitat, and either drowning beach mice or forcing them to concentrate on high scrub dunes (Blair, 1951) where they are exposed to predators. The habitat of *P. p. ammobates* includes the Fort Morgan, Alabama area, which was severely flooded by Hurricane Frederick on September 13, 1979. Washovers completely destroyed the primary dune system at Fort Morgan, Gulf Highlands, Pine Beach, Gulf Shores, the Gulf State Park, and Romar Beach. Only remnants of the secondary and tertiary lines were

left; most sand was moved inland beyond the beach dune complex. The habitat of *P. p. trissyllepsis* includes three areas on Perdido Key in Alabama and Florida. The western end of Perdido Key is part of the Gulf State Park and includes Florida Point, Alabama. It was completely covered by sand south of State Road 182 by Hurricane Frederick on September 13, 1979. Beach mouse habitat remained only on the unflooded elevations (Holliman, 1982). In the central part of Perdido Key is the Perdido Key State Preserve, which also contains beach mouse habitat, and which also was overwashed during Hurricane Frederick. The eastern end of Perdido Key is included in the Gulf Islands National Seashore, Escambia County, Florida. Eighty percent of the National Seashore was overwashed during Hurricane Frederick. The habitat of *P. p. allopkyrs* includes the Topsail Hill area of coastal Walton County and the Grayton Beach State Recreation Area, both of which were heavily damaged by Hurricane Eloise in 1975.

House mice (*Mus musculus*), which are associated with human development, may compete with beach mice for food and cover (Humphrey and Barbour, 1981). The significance of such competition is presently unknown, and some have doubted its significance (Holliman, 1982). Competition has been documented, however, between house mice and the subspecies *Peromyscus polionotus lucubrans* (Briese and Smith, 1973). Over-wintering savannah sparrows may also affect beach mice by competition for food (Holliman, 1982; Humphrey and Barbour, 1981).

#### Critical Habitat

Section 4(a)(3) of the Endangered Species Act, as amended, requires that "critical habitat" be designated, "to the maximum extent prudent and determinable," concurrent with the determination that a species is endangered or threatened. Critical habitat, as defined by Section 3 of the Act and at 50 CFR Part 424, means (i) the specific areas within the geographical area occupied by the species, at the time it is listed in accordance with the provisions of Section 4 of the Act, on which are found those physical or biological features (I) essential to the conservation of the species and (II) which may require special management considerations or protection; and (ii) specific areas outside the geographical area occupied by the species at the time it is listed in accordance with the provisions of Section 4 of the Act, upon a determination by the Secretary that such

areas are essential for the conservation of the species.

The proposed critical habitat for the Alabama, Perdido Key, and Choctawhatchee beach mice totals 61.7 km (38.3 mi.) of coastline in Baldwin County, Alabama, and Escambia, Walton, and Bay Counties, Florida, divided into 10 separate parts. Of the total critical habitat, 42.9 km (26.6 mi.) are actually now inhabited by the beach mice and 18.8 km (11.6 mi.) are not currently occupied. In the case of the Alabama beach mouse, all 22.3 km (13.8 mi.) of the proposed critical habitat are now inhabited.

The proposed critical habitat of the Perdido Key beach mouse is 17.4 km (10.8 mi.) in total length, of which 2.9 km (1.8 mi.) are now inhabited and 14.5 km (9.0 mi.) are not occupied. The occupied portion is in the Gulf State Park at the western end of Perdido Key. The unoccupied portions are in the Perdido Key State Preserve on the central part of the key and in the Gulf Islands National Seashore on the eastern end of the key. The two unoccupied areas were originally within the range of the Perdido Key beach mouse, and their protection is essential for the conservation of the animal. If populations could not be reestablished in these areas, the beach mouse would survive only in a small stretch of suitable habitat, which would be constantly subject to obliteration by tropical storms and other deleterious factors. Prior to Hurricane Frederick in 1979, a population of *P. p. trissyllepsis* did exist in the Gulf Islands National Seashore. It was destroyed by the hurricane, but fortunately the population in Gulf State Park was not completely eradicated. This experience demonstrates the necessity of maintaining several currently or potentially suitable areas of habitat for the beach mouse, if it is to have a reasonable chance for survival and recovery.

The proposed critical habitat of the Choctawhatchee beach mouse is 22.0 km (13.7 mi.) in total length, of which 17.7 km (11.1 mi.) are now inhabited and 4.3 km (2.6 mi.) are not occupied. The occupied portions are in the Topsail Hill area of coastal Walton County and on the Shell Island portion of the St. Andrews State Recreation Area, Bay County. The unoccupied portions are in the Grayton Beach State Recreation Area and adjacent private land, and on the mainland portion of the St. Andrews State Recreation Area. The two unoccupied areas were originally within the range of the Choctawhatchee beach mouse, and their protection is essential

for the conservation of the animal. The rationale is basically the same as given above for *P. p. trissyllepsis*. In the case of *P. p. alloparys*, Hurricane Eloise in 1975 had a severe impact. The population of beach mice at Grayton Beach State Recreation Area may have been extirpated at that time, and the Topsail Hill area was also heavily damaged.

In considering designation of critical habitat, 50 CFR 424.12(b) requires focus on the biological or physical constituent elements within the defined area that are essential to the conservation of the species involved. With respect to the Alabama, Perdido Key, and Choctawhatchee beach mice, the areas proposed as critical habitat currently or potentially satisfy known criteria for the physiological, behavioral, ecological, and evolutionary requirements of the animals. Meyers (1983) found optimal beach mouse habitat to be characterized by high maximum elevation of the coastal sand dunes, by relatively great difference between maximum dune height and minimum interdunal elevation, by close proximity of forest, by a sparse cover of ground vegetation with a moderate number (average 3.5) of plant species, and by a relatively low cover of sea oats. Such conditions of topography and vegetation provide necessary food and cover for populations of beach mice, and allow attainment of reproductive potential. Meyers also reported that the minimum area needed to maintain a population of beach mice is 50 hectares (124 acres), that preferable size is at least 100–200 hectares (247–494 acres), and that there should be natural corridors for migration between areas. Such requirements were considered in the delineation of the proposed critical habitat. The protection of several separate areas of habitat for each kind of beach mouse is essential for the conservation of these animals. Should a kind of beach mouse exist in only one small stretch of suitable habitat, it would be subject to extinction through the effects of tropical storms and other deleterious factors (see above discussion of Perdido Key beach mouse).

Section 4(b)(8) of the Act requires, to the maximum extent practicable, that any proposal to determine critical habitat be accompanied by a brief description and evaluation of those activities which, in the opinion of the Secretary, may adversely modify such habitat if undertaken, or may be affected by such designation. Activities most likely to adversely modify the critical habitat of the three beach mice are the continued destruction of sand

dunes for residential and commercial development. Indiscriminate pedestrian and vehicular use also adversely impacts the sand dunes.

There are several Federal activities in the coastal parts of Alabama and Florida that may have involvement with the proposed critical habitat designation. One form of involvement is the flood insurance provided by the Federal Emergency Management Agency (FEMA). County regulations in Baldwin County, Alabama, and Escambia, Walton, and Bay Counties, Florida, qualify the coastal strand under the National Flood Insurance Program administered by this agency. Insurance is provided only for completed structures. This program has never been the subject of Section 7 consultation pursuant to the Endangered Species Act (see "Available Conservation Measures," below). Should the flood insurance program be restricted on parts of the Alabama and Florida Gulf Coasts, increased risk or increased insurance costs could result. Development would be less attractive in the area.

Planned activity in the coastal strand includes a variety of commercial and residential developments. It is unlikely that expensive luxury developments will be financed by the Federal Housing Administration, Veterans Administration, or Small Business Administration. However, single-family dwellings and some commercial developments may be financed by these agencies. If such developments were considered likely to adversely modify critical habitat, Federal loans might be affected, causing some borrowers to pay higher interest rates. In any case, Federal assistance is not now authorized for development in the 16.3 km (10.0 mi.) of beach mouse habitat in the CBRS (see part "D" of above "Summary of Factors Affecting the Species").

Another Federal involvement is the Coastal Energy Impact Program (CEIP) administered by the National Oceanic and Atmospheric Administration. The CEIP is a Federal assistance program to aid State and substate units. The CEIP provides grant and loan assistance that may be used for a variety of planning studies, public works construction, land acquisition, and environmental loss mitigation projects, all associated with energy-related facility sitings. Such assistance would not, however, be allowed within the CBRS (see above paragraph). In Alabama, CEIP funds have been spent more on construction than on planning. There is growing interest in siting natural gas extraction facilities on the coastal strand, possibly

in beach mouse habitat on public lands along the Fort Morgan Peninsula. At the present time there are gas extraction rigs in Mobile Bay. In Florida most of the CEIP Federal assistance has been for planning. There has been no indication to date of any demand to site energy facilities in Florida sand dune habitat, and it is unlikely that drilling would be permitted there, because strong public objection could be expected.

The U.S. Army Corps of Engineers has proposed a beach restoration project in the area from Phillips Inlet, Bay County, Florida, eastward to, and including, the mainland portion of the St. Andrews State Recreation Area (SRA). Legislation covering the project has been introduced in Congress. The project's objective would be to build a higher dune and a correspondingly wider beach along the intensely developed, approximately 28.6-km (18-mi.) stretch to improve protection from storms. The only remaining area of value to the Choctawhatchee beach mouse within the project area is the mainland portion of the St. Andrews SRA. In recent years the beach mouse has been extirpated from this portion, perhaps by a combination of severe storms and sand dune erosion, accelerated by public use. Suitable beach mouse habitat exists on the lee side of the foredunes. It is expected that the beach nourishment project could actually enhance the beach mouse habitat within the St. Andrews SRA by creating a foredune into which sea oats and bunch-grass could pioneer.

The Army Corps of Engineers also has a routine maintenance program for the Mobile Bay Main Channel, the Perdido Pass Channel, the Pensacola Bay Channel, and the St. Andrew Bay Entrance Channel. It is doubtful that these maintenance projects would be slowed by critical habitat protection. There might be a slight increased cost associated with close monitoring of dredging and spoiling activities at the Perdido Pass Channel, since the only population of the Perdido Key beach mouse is located at Florida Point which accretes into the Perdido Pass Channel.

Fish and Wildlife Service involvement in the critical habitat area would include the acquisition, management and development of the Bon Secour National Wildlife Refuge. The proposed acquisition boundary includes approximately 6.0 km (3.7 mi.) of Alabama beach mouse habitat, of which about 4.2 km (2.6 mi.) have been purchased to date by the Service. The urgency of acquiring sand dune areas within the refuge boundaries would be emphasized by the critical habitat

designation, but few, if any, increased costs to the Refuge would result.

The Alabama Historical Commission has approached the Service about the possibility of entering into a cooperative management agreement regarding lands within the Fort Morgan State Park, including approximately 3.0 km (1.9 mi.) of beach mouse habitat. The Commission has no funding for wildlife management, and there is concern that habitat values within portions of the Park may be degraded in the future by pressures for increased public use and for natural gas extraction. Prime, though atypical, Alabama beach mouse habitat exists at the Park. It is expected that few, if any, increased costs to the Bon Secour National Wildlife Refuge, which would administer the cooperative management agreement, would result from the critical habitat designation.

Section 4(b)(2) of the Act requires the Service to consider economic and other impacts of specifying a particular area as critical habitat. The Service is notifying Federal agencies that may have jurisdiction over the land and water under consideration in this proposal. These agencies and other interested parties are requested to submit information on economic or other impacts of the proposed measure. The Service will reevaluate the geographic critical habitat designation at the time of the final rule after considering all additional information received.

It should be emphasized that critical habitat designation does not necessarily rule out Federal activities. If appropriate, the impacts will be addressed during consultation with the Service as required by Section 7 of the Endangered Species Act, as amended. Modification, and not curtailment, of the affected Federal activity has traditionally been the result of Section 7 consultations.

#### Available Conservation Measures

Conservation measures provided to species listed as endangered or threatened pursuant to the Act include recognition, recovery actions, requirements for Federal protection, and prohibitions against certain practices. Recognition through listing encourages and results in conservation actions by Federal, State, and private agencies, groups, and individuals. The Act provides for land acquisition and cooperation with the States, and requires recovery actions. Such actions are initiated by the Service following listing. The protection required by Federal agencies, and taking and harm prohibitions, are discussed, in part, below.

Section 7(a) of the Act, as amended, requires Federal agencies to evaluate their actions with respect to any species that is proposed or listed as endangered or threatened. Regulations implementing this Interagency Cooperation provision of the Act are codified at 50 CFR 402, and are now under revision (see proposal in **Federal Register** of June 29, 1983, 48 FR 29989). Section 7(a)(4) requires Federal agencies to informally confer with the Service on any action that is likely to jeopardize the continued existence of a proposed species or result in destruction or adverse modification of proposed critical habitat. When a species is subsequently listed, Section 7(a)(2) requires Federal agencies to ensure that activities they authorize, fund, or carry out are not likely to jeopardize the continued existence of such species or to destroy or adversely modify its critical habitat. If a "may affect" situation is expected, the Federal agency must enter into formal consultation with the Service. Federal activities that may be affected in this regard, with respect to the listing of the Alabama, Perdido Key, and Choctawhatchee beach mice, are described above under "Critical Habitat."

The Act and implementing regulations found at 50 CFR 17.21 set forth a series of general prohibitions and exceptions that apply to all endangered wildlife species. These prohibitions, in part, would make it illegal for any person subject to the jurisdiction of the United States to take, import or export, ship in interstate commerce in the course of a commercial activity, or sell or offer for sale any Alabama, Perdido Key, or Choctawhatchee beach mouse in interstate or foreign commerce. It also would be illegal to possess, sell, deliver, carry, transport, or ship any such wildlife that was illegally taken. Certain exceptions would apply to agents of the Service and State conservation agencies.

Permits may be issued to carry out otherwise prohibited activities involving endangered wildlife under certain circumstances. Regulations governing such permits are codified at 50 CFR 17.22 and 17.23. Such permits are available for scientific purposes or to enhance the propagation or survival of the species, or for incidental take in connection with otherwise lawful activities.

The National Park Service has already begun preliminary planning for a live trapping, captive breeding, and transplantation program that would attempt to reestablish beach mice at the Gulf Islands National Seashore. The

Mississippi State University Research Center at the National Space Technology Laboratory has been successful for the past 10 years in breeding *Peromyscus polionotus* in the laboratory. The Research Center and the National Park Service have begun discussions on captive breeding.

#### Public Comments Solicited

The Service intends that any rules finally adopted will be as accurate and effective as possible in the conservation of endangered or threatened species. Therefore, any comments or suggestions from the public, other concerned governmental agencies, the scientific community, industry, private interests, or any other interested party concerning any aspect of these proposed rules are hereby solicited. Comments particularly are sought concerning:

(1) Biological, commercial, or other relevant data concerning any threat (or lack thereof) to the Alabama, Perdido Key, and Choctawhatchee beach mice;

(2) The location of any additional populations of these species and the reasons why any of their habitat should or should not be determined to be critical habitat as provided for by Section 4 of the Act;

(3) Additional information concerning the range and distribution of these species;

(4) Current or planned activities in the involved areas, and their possible impacts on the three beach mice; and

(5) The foreseeable economic and other impacts resulting from the proposed critical habitat designation.

Final promulgation of the regulations on the Alabama, Perdido Key, and Choctawhatchee beach mice will take into consideration the comments and any additional information received by the Service, and such communications may lead to adoption of final regulations that differ from this proposal.

The Endangered Species Act provides for a public hearing on this proposal, if requested. Requests must be filed within 45 days of the date of the proposal. Such requests should be made in writing and addressed to the Endangered Species Field Supervisor, U.S. Fish and Wildlife Service, 2747 Art Museum Drive, Jacksonville, Florida 32207 (904/791-2580).

#### National Environmental Policy Act

In accordance with a recommendation from the Council on Environmental Quality (CEQ), the Service has not prepared any NEPA documentation for this proposed rule. The recommendation from CEQ was based, in part, upon a decision in the Sixth Circuit Court of Appeals which held that the preparation of NEPA documentation was not required as a matter of law for listings

under the Endangered Species Act. *PLF v. Andrus* 657 F. 2d 829 (6th Cir. 1981).

#### References

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- Howell, A. H. 1920. Description of a new species of beach mouse from Florida. J. Mamm. 1:237-240.
- Humphrey, S. R., and D. B. Barbour. 1981. Status and habitat of three subspecies of *Peromyscus polionotus* in Florida. J. Mamm. 62:840-844.
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University Presses of Florida, Gainesville, pp. 19-20.

Meyers, J. M. 1983. Status, microhabitat, and management recommendations for *Peromyscus polionotus* on Gulf Coast beaches. Rept. to U.S. Fish and Wildl. Serv., Atlanta, 29 pp.

#### Author

The primary author of this rule is Ms. Robin H. Fields, U.S. Fish and Wildlife Service, 2747 Art Museum Drive, Jacksonville, Florida 32207 (904/791-2580).

#### List of Subjects in 50 CFR Part 17

Endangered and threatened wildlife, Fish, Marine mammals, Plants (agriculture).

#### Proposed Regulations Promulgation

#### PART 17—[AMENDED]

Accordingly, it is hereby proposed to amend Part 17, Subchapter B of Chapter I, Title 50 of the Code of Federal Regulations, as set forth below:

1. The authority citation for Part 17 reads as follows:

Authority: Pub. L. 93-205, 87 Stat. 884; Pub. L. 94-359, 90 Stat. 911; Pub. L. 95-632, 92 Stat. 3751; Pub. L. 96-159, 93 Stat. 1225; Pub. L. 97-304, 96 Stat. 1411 (16 U.S.C. 1531 *et seq.*).

2. It is proposed to amend § 17.11(h) by adding the following, in alphabetical order, to the List of Endangered and Threatened Wildlife, under "Mammals":

#### § 17.11 Endangered and threatened wildlife.

\* \* \* \* \*

(h) \* \* \*

Species		Historic range	Vertebrate population where endangered or threatened	Status	When listed	Critical habitat	Special rules
Common name	Scientific name						
Mouse, Alabama beach	<i>Peromyscus polionotus ammobates</i>	U.S.A. (AL)	Entire	E		17.95(a)	N/A
Mouse, Choctawhatchee beach	<i>Peromyscus polionotus allophrys</i>	U.S.A. (FL)	Entire	E		17.95(a)	N/A
Mouse, Perdido Key beach	<i>Peromyscus polionotus trissyllepsis</i>	U.S.A. (AL, FL)	Entire	E		19.95(a)	N/A

3. It is further proposed to amend § 17.95(a), "Mammals," by adding the critical habitat of the Alabama, Choctawhatchee, and Perdido Key beach mice, as follows. The position of these critical habitat entries under § 17.95 will be determined at the time of publication of a final rule.

#### § 17.95 Critical habitat—fish and wildlife.

(a) \* \* \*

##### Alabama beach mouse

*Peromyscus polionotus ammobates*

Alabama. Areas of land, water, and airspace in Baldwin County with the following components (St. Stephens

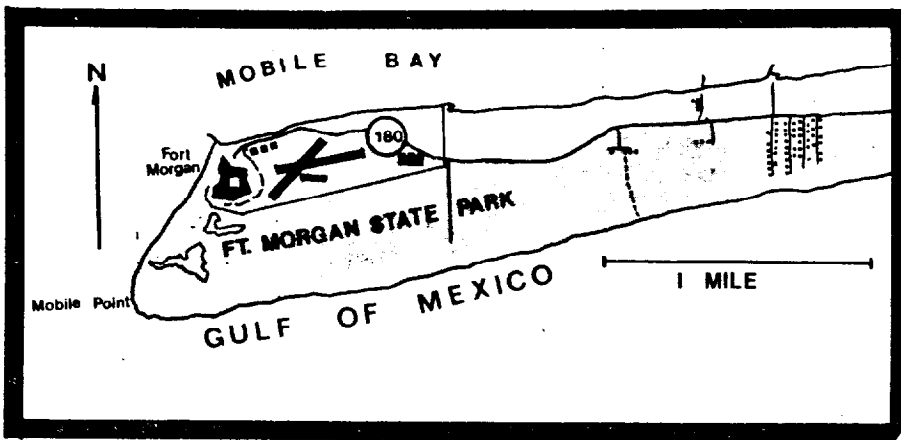
Meridian): (1) that part of the Fort Morgan Peninsula south of State Road 130 and west of 67°59'25" W; (2) those portions of T9S R3E Sec. 30 and T9S R2E Sec. 25-30 extending 152.5 meters (500 feet) inland from the mean high tide line of the Gulf of Mexico; (3) those portions of T9S R4E Sec. 13, S½ Sec. 14, NE¼ Sec. 21, N½ Sec. 22, and NW¼ Sec. 23, and T9S R5E W½ Sec. 18, south of State Road 182.

Within these areas the major constituent elements that are known to require special management considerations or protection are dunes and interdunal areas, and associated grasses and shrubs that provide food and cover.

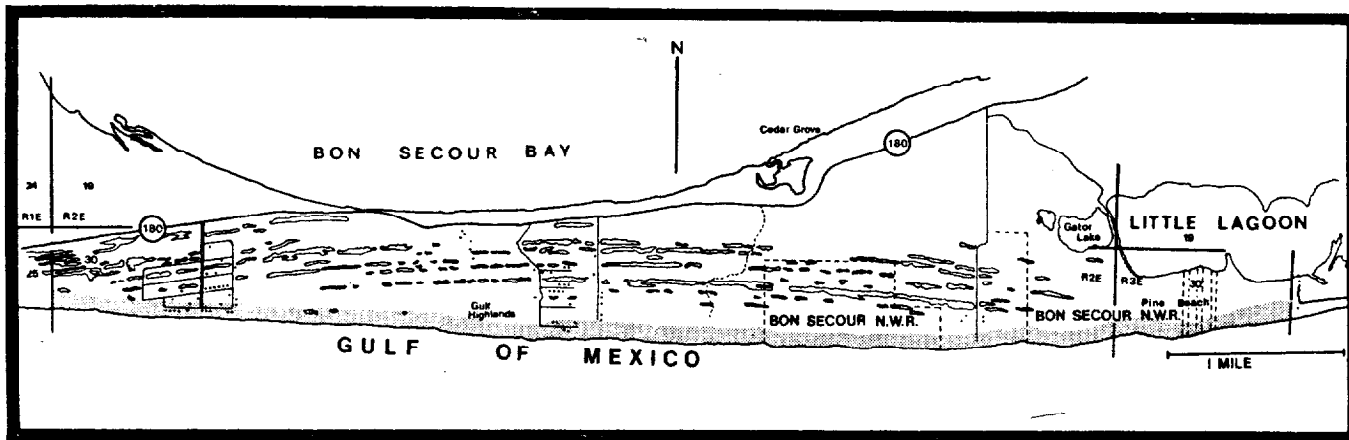
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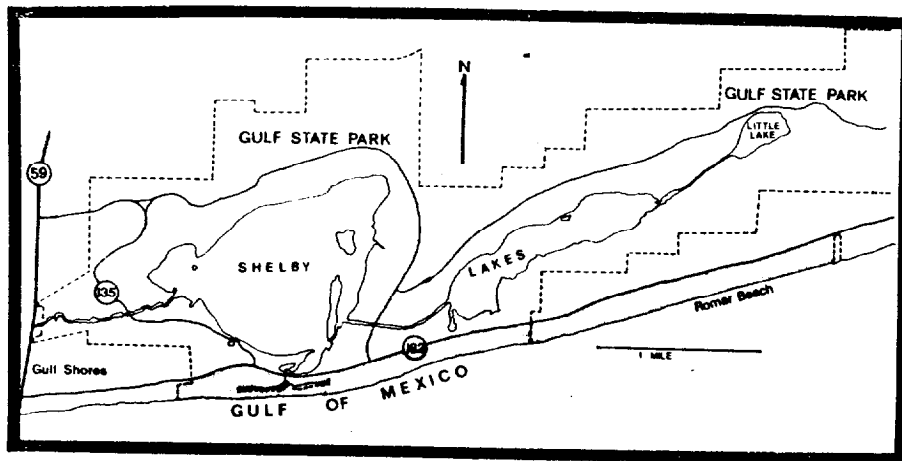
## Alabama Beach Mouse Critical Habitat (1)



## Alabama Beach Mouse Critical Habitat (2)



## Alabama Beach Mouse Critical Habitat (3)



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## Choctawhatchee beach mouse

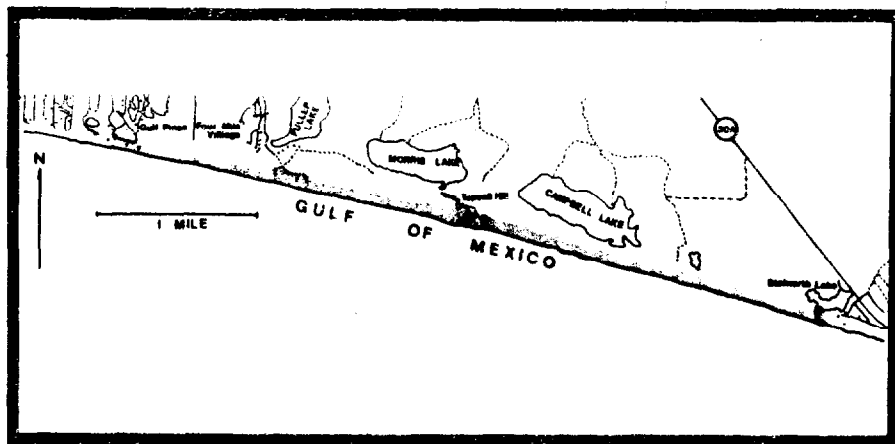
*(Peromyscus polionotus allopshys)*

Florida. Areas of land, water, and airspace in Walton and Bay Counties with the following components (Tallahassee Meridian): (1) those portions of T2S R21W E½ Sec. 34, Sec. 35-38, T2S R20W S½ Sec. 31, and T3S R20W W½ Sec. 4, N½ Sec. 5, and NE¼ Sec. 6 extending 152.5 meters (500 feet) inland from the mean high tide line of the Gulf of Mexico; (2) those portions of T3S R19W W½ Sec. 15 and Sec. 16 extending 152.5 meters (500 feet) inland from the mean high tide line of the Gulf of Mexico; (3) those

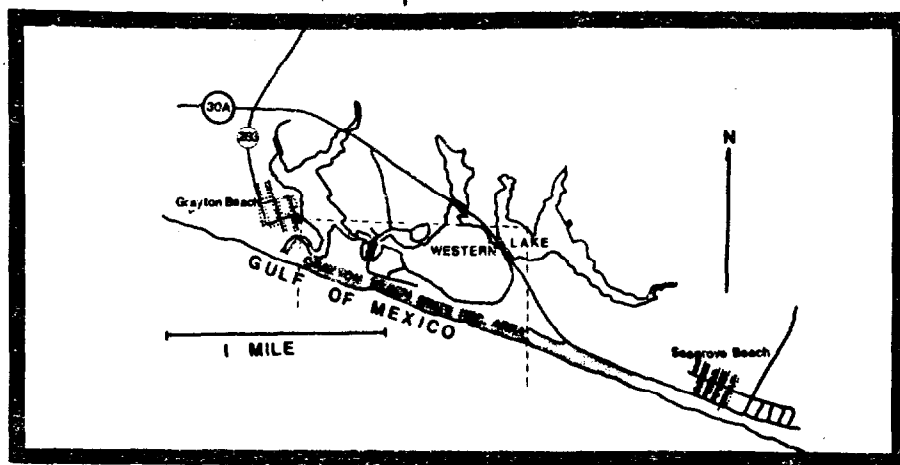
portions of the mainland part of the St. Andrews State Recreation Area in T4S R15W NE¼ Sec. 21 and Sec. 22 extending 152.5 meters (500 feet) inland from the mean high tide line of the Gulf of Mexico; (4) those portions of Shell Island in T4S R15W Sec. 25-27 and Sec. 36, T4S R14W Sec. 31, and T5S R15W Sec. 4-6 extending 152.5 meters (500 feet) inland from the mean high tide line of the Gulf of Mexico.

Within these areas the major constituent elements that are known to require special management considerations or protection are dunes and interdunal areas, and associated grasses and shrubs that provide food and cover.

## Choctawhatchee Beach Mouse Critical Habitat (1)



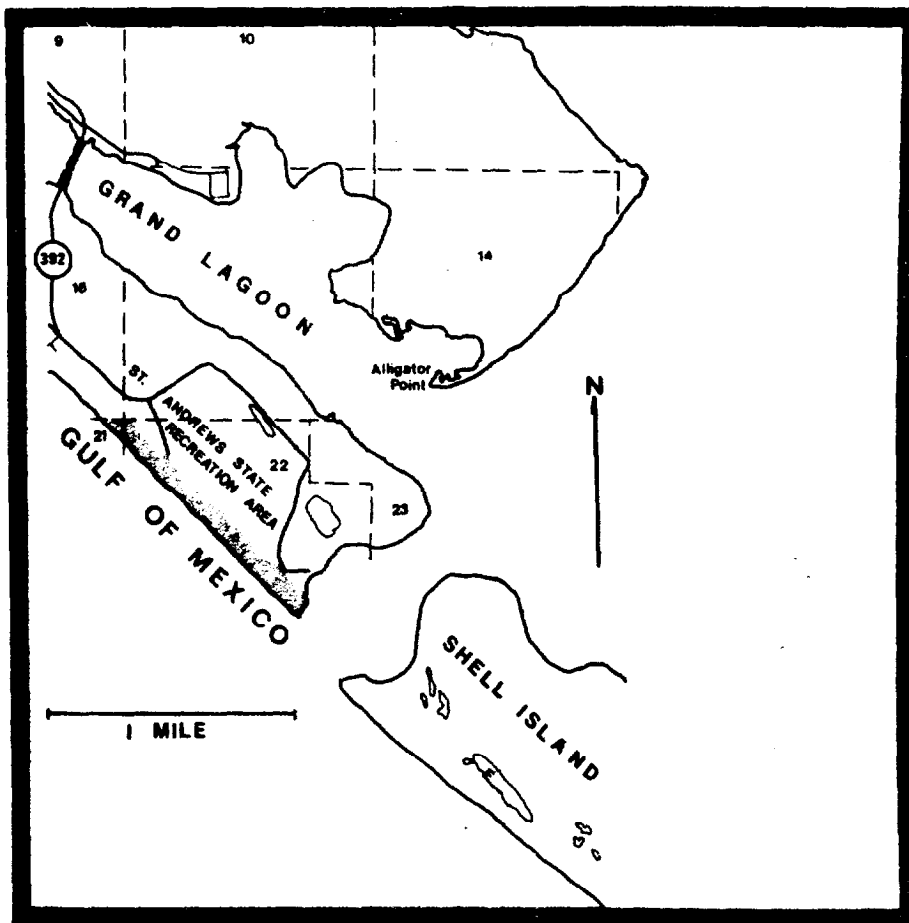
## Choctawhatchee Beach Mouse Critical Habitat (2)



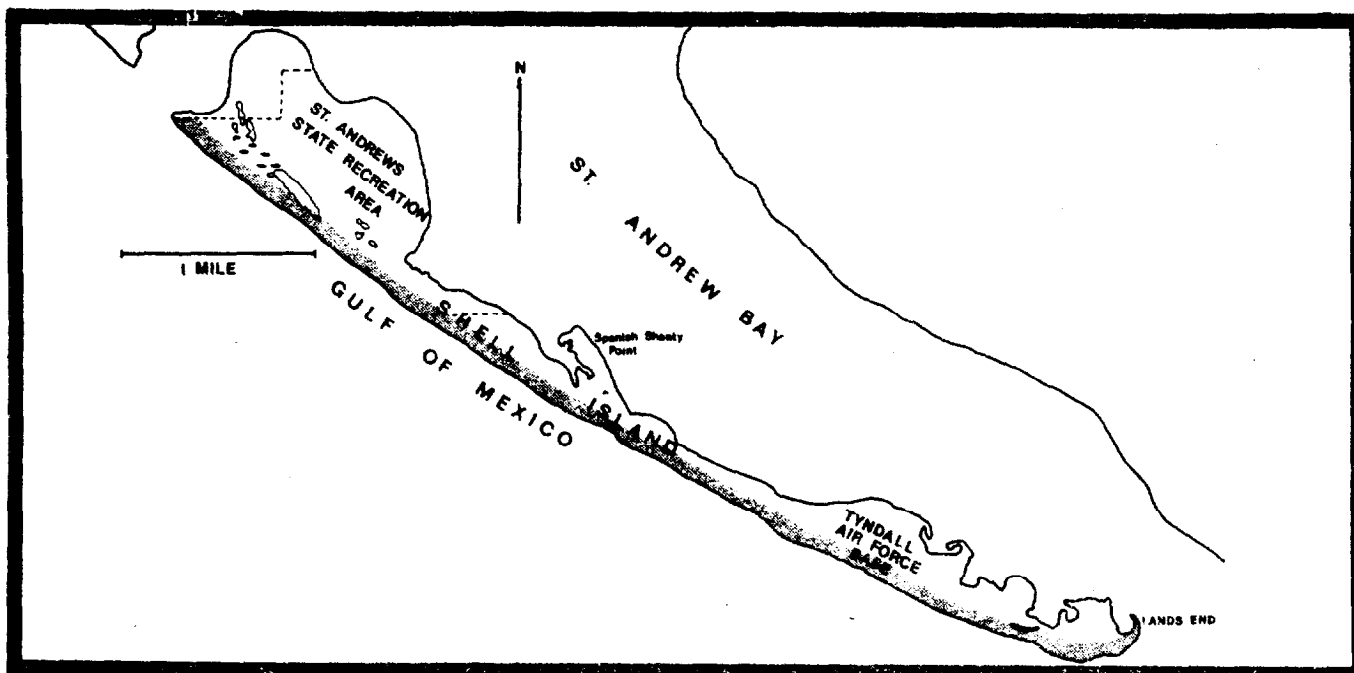
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## Choctawhatchee Beach Mouse Critical Habitat (3)



## Choctawhatchee Beach Mouse Critical Habitat (4)



**Perdido Key beach mouse***(Peromyscus polionotus trissyllepsis)*

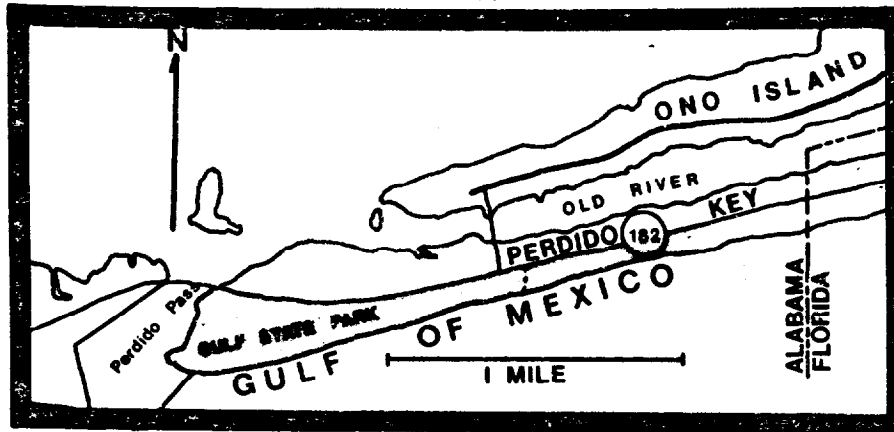
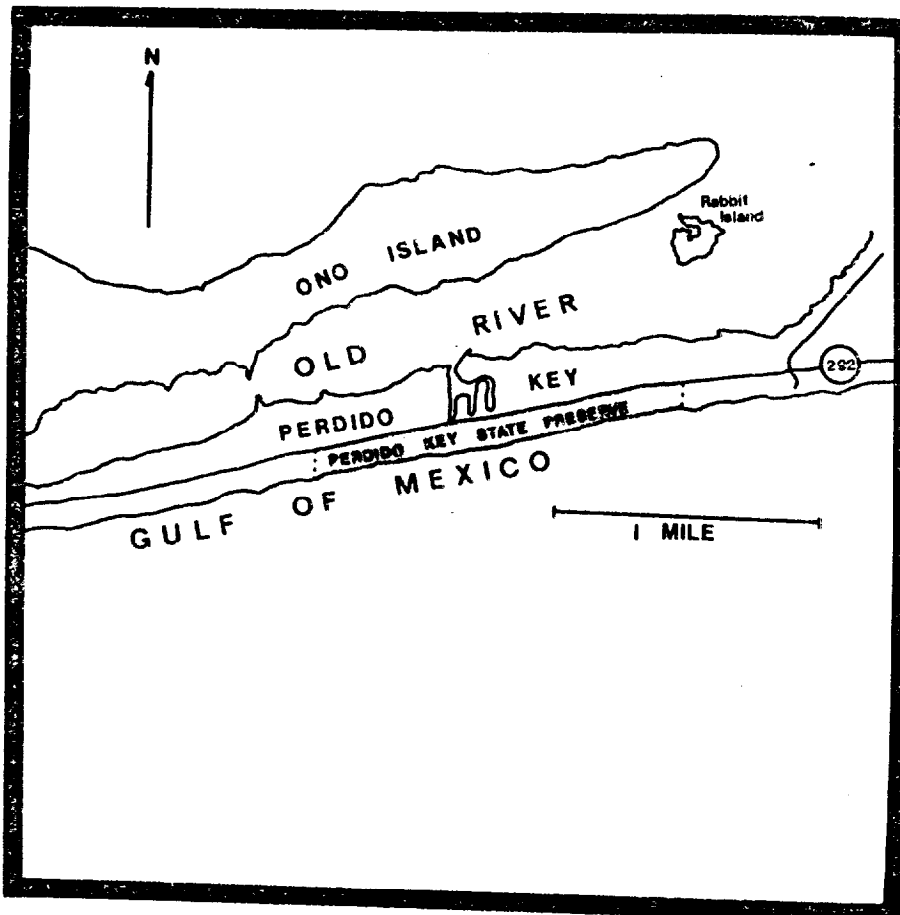
Alabama. An area of land, water, and airspace in Baldwin County with the following components (Tallahassee Meridian): those portions of T9S R33W W¼ Sec. 2 and Sec. 3 south of South Road 182.

Florida. Areas of land, water, and airspace in Escambia County with the following components (Tallahassee Meridian): (1) those portions of T3S R32W Sec. 32-33 and T4S R32W Sec. 5 south of State Road 292; (2)

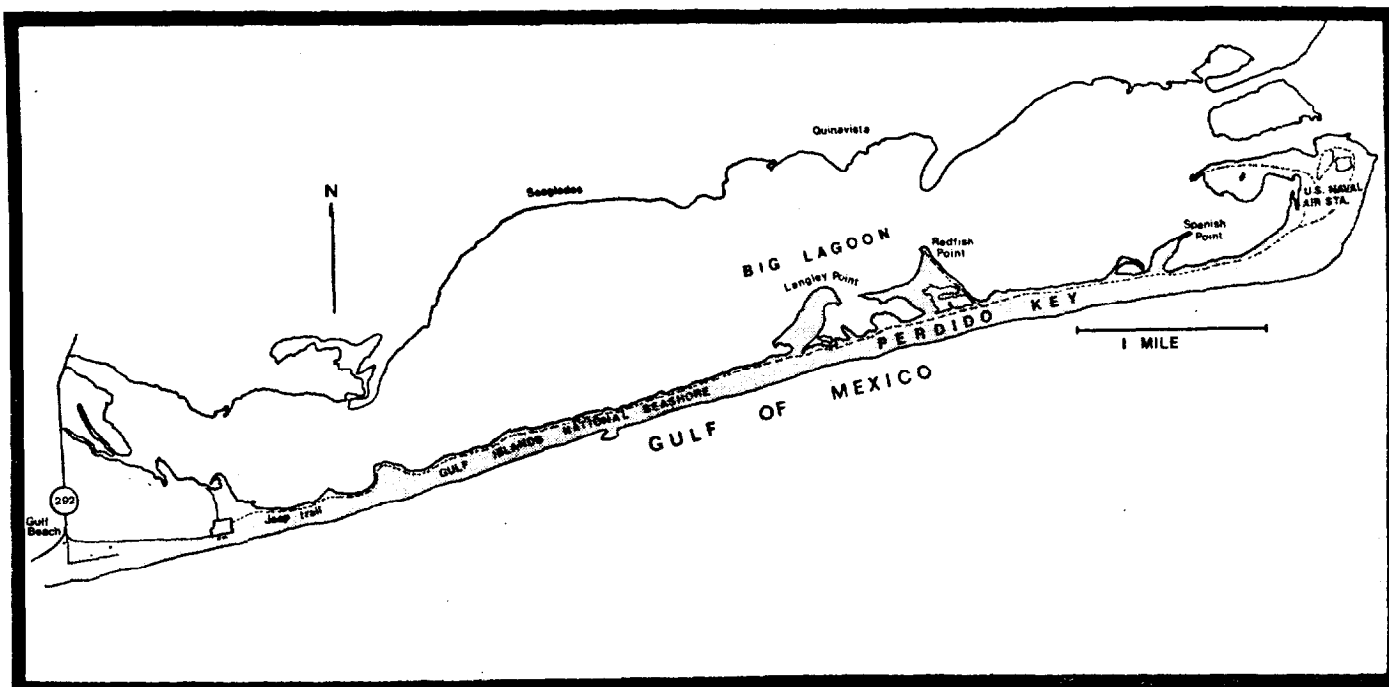
those portions of Perdido Key in T3S R31W Sec. 25-26 and Sec. 28-34, in T3S R32W E¼ Sec. 36, and in T3S R32W Sec. 35 and W¼ Sec. 36 south of the entrance road and parking lot of the Gulf Islands National

**Seashore.**

Within these areas the major constituent elements that are known to require special management considerations or protection are dunes and interdunal areas, and associated grasses and shrubs that provide food and cover.

**Perdido Key Beach Mouse Critical Habitat (1)****Perdido Key Beach Mouse Critical Habitat (2)**

## Perdido Key Beach Mouse Critical Habitat (3)



Dated: April 9, 1984.

G. Ray Arnett,

*Assistant Secretary for Fish and Wildlife and  
Parks.*

[FR Doc. 84-11573 Filed 6-6-84; 8:45 am]

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